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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/592,003	09/07/2006	Kouji Kawamura	1033318-00035	6773
21839 7590 01/15/2008 BUCHANAN, INGERSOLL & ROONEY PC POST OFFICE BOX 1404 ALEXANDRIA, VA 22313-1404			EXAMINER MUSLEH, MOHAMAD A	
			ART UNIT 2832	PAPER NUMBER
			NOTIFICATION DATE 01/15/2008	DELIVERY MODE ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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## Office Action Summary

Application No.

10/592,003

Applicant(s)

KAWAMURA ET AL.

Examiner

Mohamad A. Musleh

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 07 September 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 September 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>09/07/2006</u> | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

#### **Claim Rejections - 35 USC § 103**

*The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:*

*(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.*

1. **Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over leiti et al. US 7,135,953 B2 [leiti] in view of Savage et al. US 4,106,482 A [Savage].**
2. **Regarding claims 1, 3 and 8, at [figs. 6-13] leiti teaches a thermal trip device [1] in which a bimetal [3/4] is heated by over current and performs trip operation of a circuit by curvature of the heated bimetal [abstract]. But leiti does not teach at least one part of the surface of the bimetal is made to be black. Savage teaches that it is known to have a surface with black part, as set forth at [col. 1, lines 62-63]. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify leiti's teachings in order to have a black part as taught by Savage to maximize absorption of heat radiation as disclosed at [col. 1, lines 62-63].**
3. **Regarding claims 2 and 4, at least one part of the surface of the bimetal is made to be matte black [at col. 1, lines 62-63, Savage teaches that it is known to have a matte black surface].**
4. **Regarding claims 5 and 6, at [fig. 4] leiti teaches the temperature measurement part of the bimetal is provided with a bending part [4] bent substantially perpendicular to longitudinal**

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*direction, and the surface of the bending part is made to be black or matte black [see claim 1's rejection].*

5. *Regarding claim 7, see claims 1 and 6 rejection.*


### **Conclusion**

*The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See the notice of references cited (PTO-892). Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Mohamad A. Musleh** whose telephone number is (571) 272-9086. The examiner can normally be reached on M-F (7:30-5:00 Est. Time) 1st Friday Off.*

*If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Elvin G. Enad** can be reached on (571) 272-1990. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.*

*Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.*

MM

  
ELVIN ENAD  
SUPERVISORY PATENT EXAMINER  
07 JAN 08

**Mohamad A Musleh**  
Examiner  
Art Unit 2832